

U.S.S.

STATION

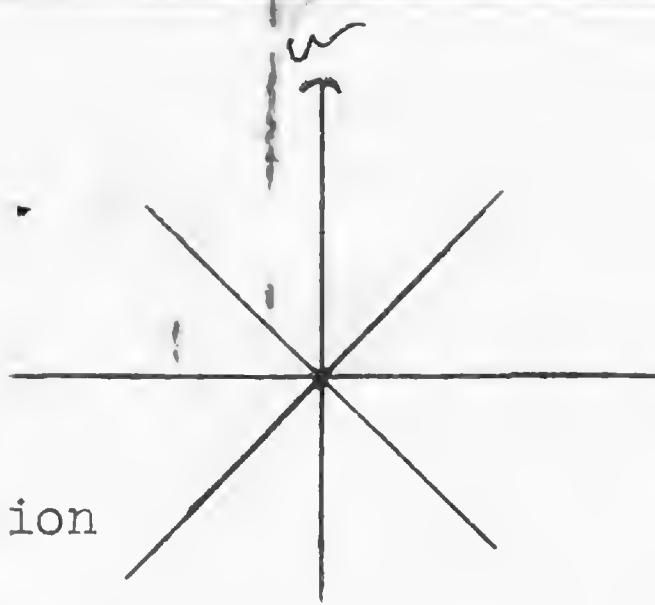
LATITUDE -

LONGITUDE 11

DA

TE NOVEMBER 1967

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

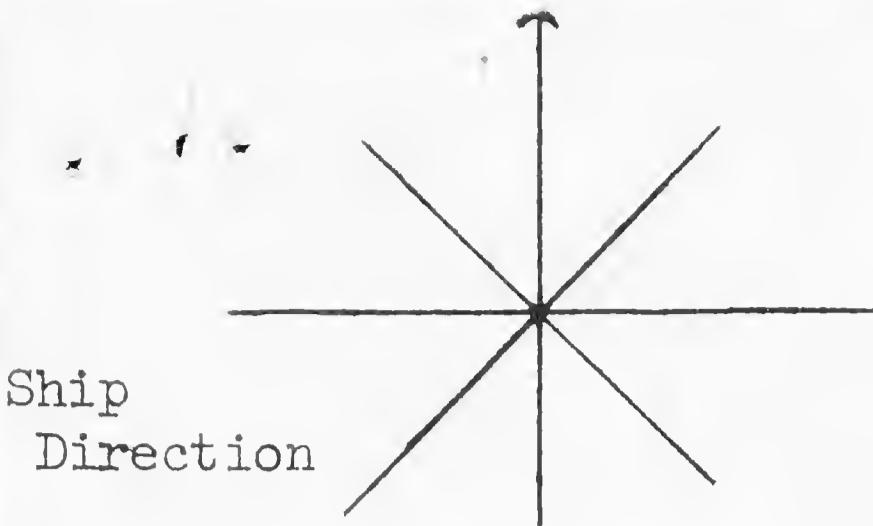
OBSERVERS:

Date 16 Nov 67
Pg. # 1

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
0720	Gull sp				BEGIN OBS.	
0721	HERRING GULL	3	ee		mm 1 leg small.	
	BFA	1				
0723	BON. GULL	2	ee			BG. - 3
0724	PHAL. SP.	2	ee			PAREID - 15
0726	PHAL SP.	3	ee			SS - 1
0728	SCOT. SH.	1	ee			BT - 1
0731	PITTL SP	2	S			Look - 2
0734	" "	2	ee		SLICKS	
37	" "	2	ee		SLICKS & SWIMMING	
38	" "	1	S			
50	" "	1	ee			
54	BLACK TERN ST.	1	ee		CALLING.	
0807	RED BILLED GULL	2	ee			Stomach - 2
08	LWRS P	1	ee			RIDGE - 2
10	PHAL SP	2	ee			SP - 1
16	SMALL GULL	1	ee		ON H ₂ O BON?	
17	SHEAR PPET	1	ee		SS/ FLM	
18	RED PHAL	1	S			27 ✓
30	WRS P	1	ee			
34	JEG SP	2	ee		POM? LTPN.	
38	SCOT. SH	2	S			JSR. - 2
47	" "	1	S			25 - 15
50	LWRS P	1	ee			Stomach - 6
53	SHEAR PPET	1	S			SP - 1
56	SCOT. SH	2	S			26.000 - 1
0900	LGE. ALCID	1	ee			
08	SCOT. SH	1	S			
09	WRS P	1	ee			
13	SCOT. SH	1	ee			
22	" "	2	S			25 ✓
28	HERR. GULL	1	ee		ad m/2 imm	
33	SCOT. SH	1	S			
34	LWRS P	1	ee			
35	" "	1	ee			
55	LWRS P	1	ee			
55	Sooty Shear	1	ee			
82	" "	2	ee			
1003	" "	2	ee			
05	St. Pet	1	ee			



Ship
Direction

OBSERVERS:

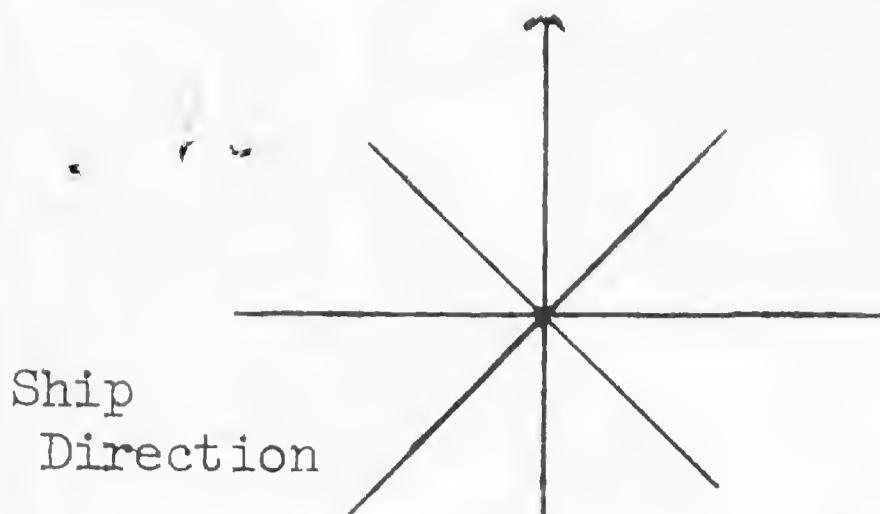
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Date 16 Nov 67
Pg. # 2

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1015	H. Gull	(4)	ee		Following 3 P.m. 1 Ad
22	R. Phal	3	ee		on H ₂ O
24	Fulmar	1	ee		
24	Sooty Shear	1	ee		on S ₁ , S ₂
28	St. Pet	2	ee		
45	Sooty Shear	1	ee		
50			ee		
57	Sooty Shear	3	S		
59	" "	5	S		
1105	Pintail	32	S		
07	BFA	(2)	ee		
12	LWRSP	1	ee		
13	"	1	S		
13	Sooty Shear	1	S		
17	" "	1	S		
18	LWRSP	1	ee		
52	"	1	ee		
58					150+ PORPOISE LISSODELPHIS REL. 2
1202	LWRSP	1	ee		
06	LOON SP WATERFOWL	4	E		LOONS 8
07					WHITE 1 (Sperm $\frac{1}{2}$ small $\frac{1}{2}$)
08	Sooty Shear	1	ee		
10	"	1	ee		
16					1 SPERM
17					
18	Storn Pct	12+2	ee		7 SPERM
20	LWRSP	1	ee		a milling flock
33	"	1	ee		
41	Loon	1	ee		
45	BFA	(3)	ee		Following ship
48	Jugn SP	1	N		Darting
53	H Gull	(5)	ee		From Pem or Parasit.
047	Phal SP	1	ee		1 ad & 1st winter ad landed on deck
	St. Pet	1	ee		
53	H Gull	(5)	ee		
54	Sooty Shear	1	S		5 1st winter
58	" "	1	S		
1405	" "	3	S		
06	St. Pet	2	ee		
11	St. Pet	1	S		
11	Sooty Shear	1	S		
14	LWRSP	1	ee		
15	Loons	2	SE		
18	Sooty Shear	2	SE		



Ship
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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 16 Nov. 67
Pg. # 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1420	Phalarope	3	ee	
23	Loon sp	1		
27	Sooty Shear	1	SE	
30	St. Pet	3	S	
35			ee	
40	Sy. Pet	2	ee	
46	Loon	1	ee	
49	Sooty Shear	1		
50	St. Pet	2	S	
1510	Sooty Shear	2	ee	
14	Jaeger sp	2	S	
15	S. Sooty Shear	1	NE	
25	St. Pet	2	S	
25	Sooty Shear	3	ee	
35				
35	SOOTY SP.	3	ee	
40	Jaeger sp	1	ee	
43	Sooty Sh	1		
44	St. Pet	1	S	
54			ee	
56	LOON SP	4	SE	
57	SOOTY SH	2	S	
1600	" "	1	ee	
03	" "	1	ee	
04	STORM PET	1	ee	
07	SHEAR/PET	1	ee	
14	SOOTY SH	2	S	
15	LOON	1	SE	
20	SOOTY SH	1	S	
25	" "	1	S	
27	" "	2	S	
28	STORM PET	2	S	
32	" "	1	S	
33	SOOTY SH	1	S	
40	LOON	1	SE	
43	S/SP	1	SE	
44	STORM PET	1	ee	
47				
47	Bird	3	ee	
52	S/SP	1	ee	
55	STORM PET	1	S	
57	SOOTY SH	2	S	
1705	STORM PET	2	ee	
10	S/SP	1	S	
12	STORM PET	1	S	
13				

CLOSE OBS. SS

SI-MNH-958-e

Rev. 5-66



Ship
Direction

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

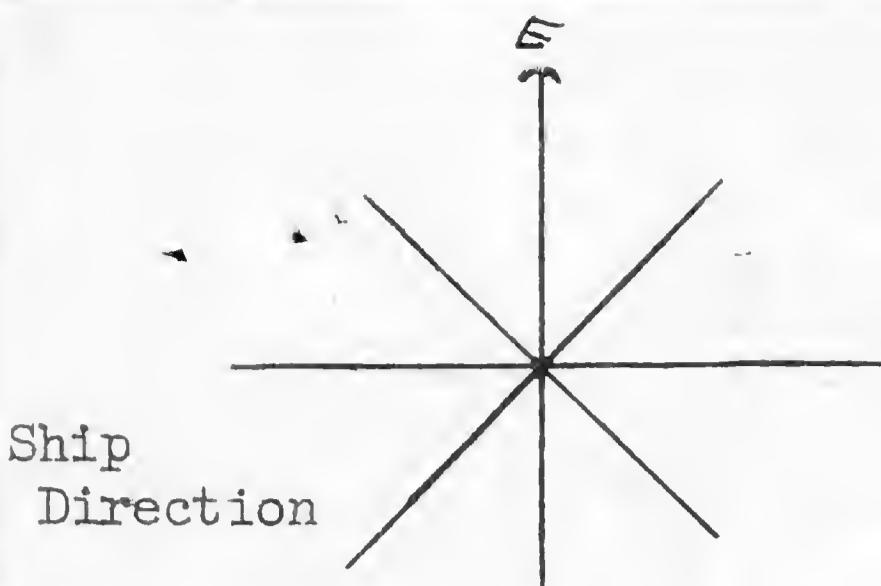
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

Date 17 Nov 67
Pg. # 1

0658							
0712	BFA	1	ee				
17	"	2	ee				
25	Sooty Shear	1	ee				
43	" "	2	ee				
0801	LWRS P	1	ee				
03	Sooty Shear	1	ee				
10	" "	1	ee				
15	" "	1	ee				
18	" "	2	ee				
25	" "	1	ee				
27	" "	1	ee				
32	" "	1	ee				
36	" "	1	ee				
37	" "	1	ee				
53	" "	2	ee				
53	H. Gull	1	ee				
0909	Sooty Shear	1	ee				
35	" "	1	ee				
36	" "	1	ee				
47	" "	1	ee				
49	" "	1	ee				
53	" "	1	ee				
54	LWRS P	4	ee				
1005	Sooty Shear	1	ee				
07	" "	1	ee				
18	LWRS P	1	ee				
20	Sooty Shear	1	ee				
36	LWRS P	1	ee				
30	"	1	ee				
55	Sooty Shear	1	ee				
56	" "	2	ee				
1003	LWRS P	5	ee				
65	"	2	ee				
06	"	2	ee				
10	Sooty Shear	1	ee				
13	" "	1	ee				
16	" "	1	ee				
20	SOOTR PET	1	ee				
30	SOOTR SH	3	ee				
31	LWRS P	1	ee				
42	Sooty Shear	1	ee				
53	LWRS P	1	ee				
55	"	2	ee				
1207	"	2	ee				
08	SOOTR SH	1	ee				
20	STORM PET	1	ee				



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

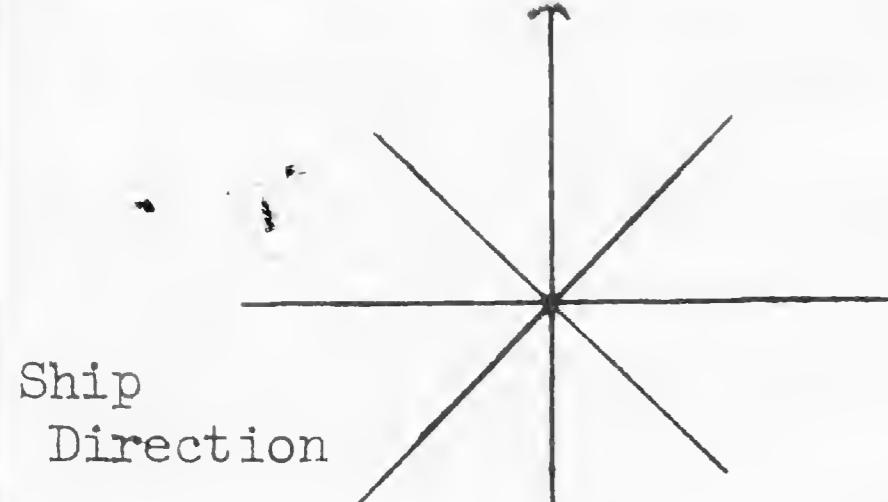
OBSERVERS:

Date 17 Nov.
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1228	LWNSP	1	ee		WINDS SS ESE 10 KTS
30	"	1	ee		RAIN CHOPPY
40	STORM PET	2	S		
43	COOMS? PET	1	ee	REL. 2	
44	SISL	1	SE		
45	STORM PET	1	ee		ee with coom?
47	SOOTY SH	2	S		
54	STORM PET	1	S		
55	LWNSP	1	ee		landed on H ₂ O
57	SOOTY SH	2	S		
58	STORM PET	1	S		
1303	SOOTY SH	1	S		
04	POM TREG	1	ee		
05	SOOTY SH	1	S		
07	" "	1	S		
08	BFA	2	ee		both dark all 3
18	LWNSP	1	ee		
27	SOOTY SH	1	S		
34	" "	2	S		
45	" "	1	S		RAIN C ESS ESS
37	LWNSP	1	ee		WINDS INC 12 ESS G S
58	SOOTY SH	3	S		
1408	" "	4	S		
16	" "	1	S		
21	" "	1	S		arcing high
32	" "	2	ee		
	STORM PET	2	ee		
33	LWNSP	1	ee		
42	STURN	1	S		
45	SOOTY SH	1	S		
47	" "	2	S		
49	" "	1	S		
50	STORM PET	2	ee		
56	LWNSP	1	ee		
58	SOOTY SH	1	S		
1506	" "	1	S		
07	" "	1	S		
08	" "	1	S		
11	" "	1	S		
14	" "	2	S		
25	" "	4	S		
28	" "	1	S		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

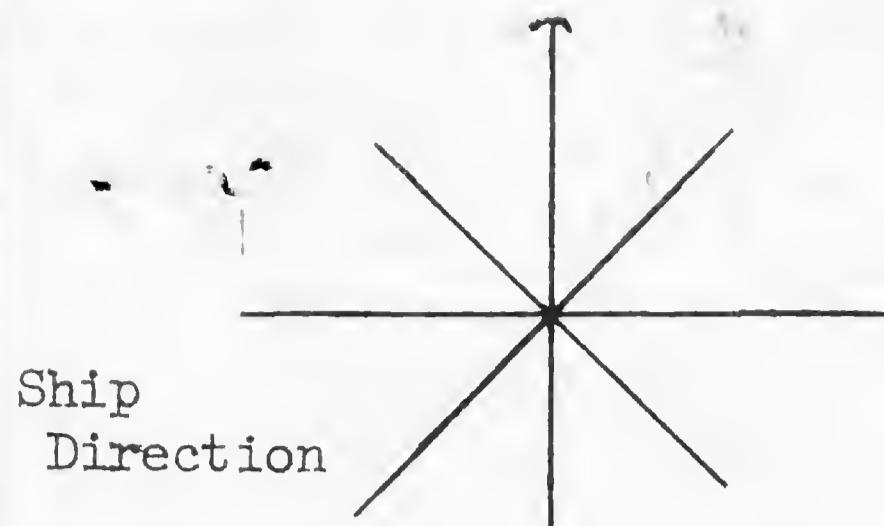
OBSERVERS:

Date 12 Nov.
Pg. # 3

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1529	LWRSP	1	ee		
1532	SOOTY SH	1	S		STORM - 38
36	" "	2	S		COOK - 1
37	LWRSP	1	S		55 - 61
38	SOOTY SH	1	S		P.J. - 1
43	" "	2	S		
45	" "	1	S		
50	" "	1	S		
1603	" "	2	S		STORM - 1
04	STORM PET	1	ee		
12	SOOTY SH	2	S		
17	" "	1	S		
19	STORM PET	1	S		
20	SOOTY SH	1	S		
25	LWRSP	84	S		
28	SOOTY SH	1	S		
33	LWRSP	1	S		
35	SOOTY SH	1	S		
36	LWRSP	2	S		
40	"	2	S		
52	"	1	ee		
FF	1700	SOOTY SH	5	3	MILLING TIGHTLY AROUND OBJECT IN A SLEEK PROBABLY MILLER REFUSE
		LWRSP	10	3	KILLER WHALE - 2



Ship
Direction

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

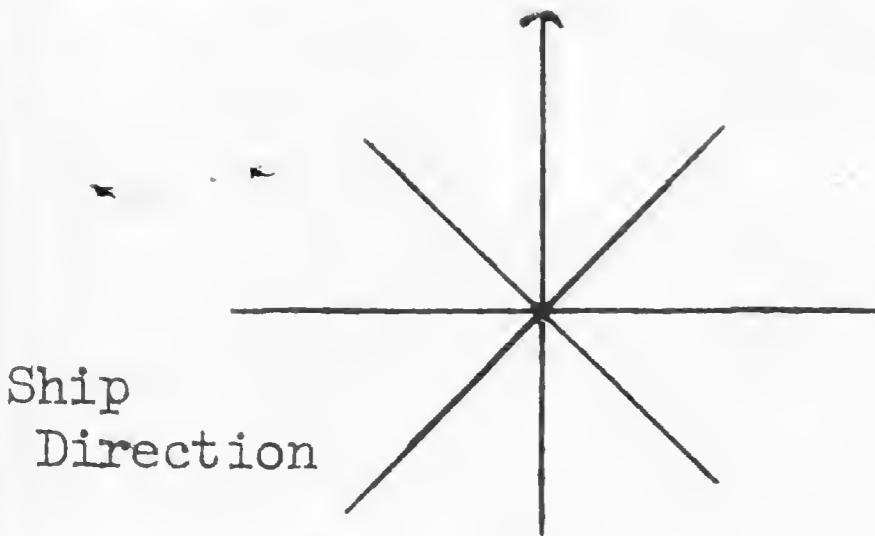
SPECIMEN

or

Date 18 Nov 67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0642					SUNRISE BEGIN OBS.
55					
0700	BFA	2	ee		Begin obs
08	Sooty Shear	2	S		10 min
21	H. Gull	1	ee		
30	Sooty Shear	2	SW		Following Tern
55	" "	2	S		
57	H. Gull	3	ee		
0810	Sooty Shear	1	S		1st winds
11	Taeger SP	2	ee		
19	WIBSP	1	ee		
22	Sooty Shear	1	S		
29	Taeger SP	1	S		
35	Pom Jaeger	1	S		
36	H Gull	3	ee		Int.
	W Gull	2	ee		1st winter
	Gull?	1	ee		Ad
0906	Taeger SP	2	S		3 feedings on garbage
14	Sooty Shear	1	S		
15	Phalarope	8	ee		
49	Pom Jaeger	1	ee		
1010	Red Phal	2	ee		Tern
10	Bird	1	ee		
11	Red Phal	60 ± 5	ee		Distal - white - tropic bird on gall
14	" "	4	ee		on H2O flock ST. ITTISH
20	JAEG. SP	1	ee		
20	RED PHAL	1	ee		
22	SOOTY SH	3	S		
25	" "	1	S		
27	R PHAL	1	S		
40					1 SPORN white
46	BONAPARTE G.	1	ee		adult winter plum. following autumn
55	SOOTY SH	1	S		
55	STORM PET	1	S		
1111	JAEG SP	1	ee		rom? lt ph
25	SOOTY SH	1	S		
27	H GULL	1	ee		
35					C/L 1120 180 → 270 1 SPORN white
56	WIBSP	8	S		
1217	"	1	S		
40	"	1	S		
45	Phal SP	1	S		
46	WIBSP	1	S		
55	Phal SP	1	ee		
57	" "	3	E		



Ship
Direction

OBSERVERS:

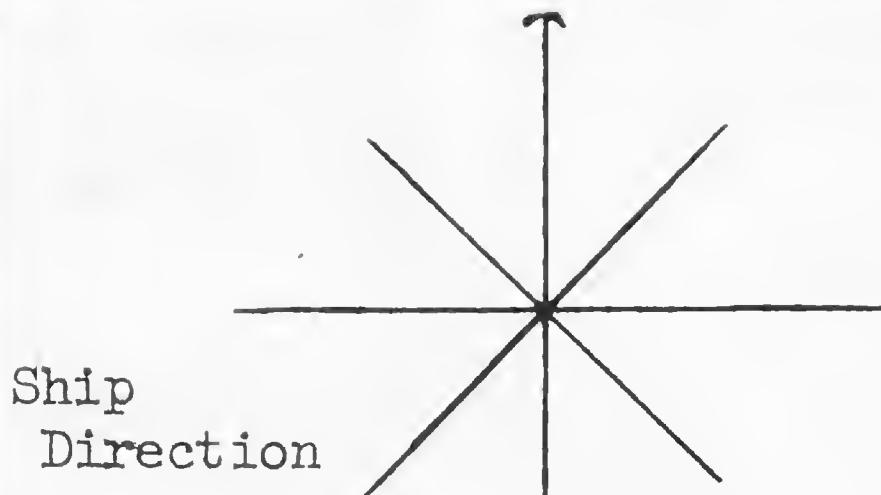
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Date 18 Nov 67
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1330					SHIFT IN H ₂ O OBS FROM SHIFT
1330	RED PHAL.	2	ee		
44	" "	1	S		
50	SOOTY SH.	1	ee		
CC	52	RED PHAL	2	ee	2 COCC. CHAN
C	55	LWRSP	1	ee	1 COCC. "
	56	RED PHAL	1	ee	
1405	" "	2	ee		
CC	06	PAL. FOOT SH.	1	ee	
09	RED PHAL	4	ee		2 COCC. CHAN
15	" "	2	ee		
C	25	" "	10	ee	1 COCC. "
	26	STORM PET	1	ee	
C	30	RED PHAL	6	ee	1 COCC. "
	40	STORM PET	1	ee	
C	50	RED PHAL	4	ee	1 COCC. "
	53	" "	7	ee	
C	57	SHEARWATER	1	ee	
C	1500	POM. GULL	1	ee	
CCCCC	01	RED PHAL	20+	ee	SITTING ON REEF 1 COCC. CHAN LT. PIT. NON RD.
CCCCC	10	" "	25+	ee	ON H ₂ O 2 COCCETOS, CHAN
C	15	" "	1	ee	1 COCC. CHAN
C	17	SOOTY SH.	1	ee	1 " "
	1634	Pom. Jiggy	1	S	Front. Ad
	36	Sooty Shear	1	ee	
	54	LWRSP	1	ee	
M	1706	Sooty Shear	1	ee	Delphinus
	07				Porpoise 5 m Bow
	08				
C	1525	RED PHAL	5	ee	Six scf close obs
		SOOTY SH.	1	ee	1 COCC. CHAN
	30	RED PHAL	50+	S	
	32	STORM PET	1	ee	SOOTY SH/ POM.
CC	35	RED PHAL	3	ee	
C	45	LWRSP	6	ee	2 COCC. CHAN
	50	RED PHAL	2	S	1 COCC. "
C	51	SOOTY SH.	1	ee	
C	1605	RED PHAL	1	ee	1 COCC. "
	07				DECAMINOS CA 200 RIDING SHIRE BOW
	1620				SHIFT OUT

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Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 19 Nov 67
Pg. # 1

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0656					SUNRISE REACH OBS.
0657	BFA	(3)	ee		
	HERRING.	(1)	ee		ad.
0707					15° DELPHINUS UNDER BOW
10	STORM PET	1	ee		
30	HERRING GULL	2	ee		ad, 1 min on ADP sheets
	Glaucous. m.	1	ee		ad, 1 min on ADP sheets
0800	SOOTY SH	1	ee		1 best wind
			S		among high
0840	LA	1	ee		
55	SOOTY SH	1	ee		
0900	BFA	(4)	ee		all dh.
0930	SOOTY SH	1	S		
1014	Small Phalarope	1	SW		Probably cons - Rel 3
15	Sooty Shear	2	S		
20	Small bird	1	SW		
110	SOOTY SH	1	S		
12	Bird sp.	1	ee		in Heavy squall
1705	BFA	(3)	ee		11:00 - 2 D/K
21					Sunset

NW 25-30°
SEAS - 20°
overcast to clear and flagged good
air circulation

STORM - 1

HERRING - 2

GLAUCOUS - 1

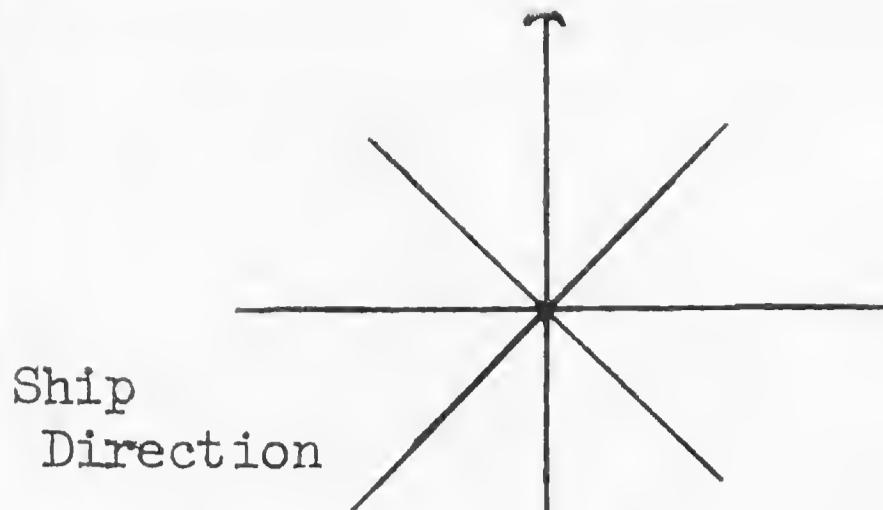
SOOTY - 60

DELPHINUS - 1

PHALAROPE - 1

SOOTY - 2

✓ 14



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

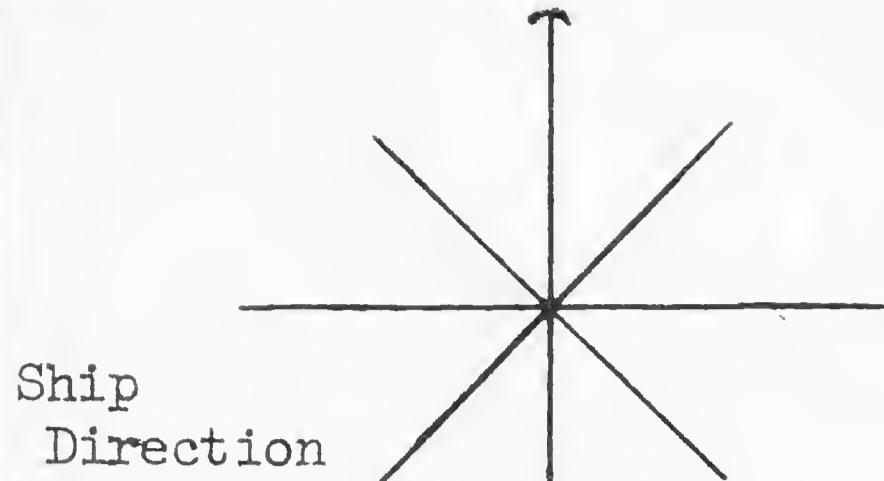
OBSERVERS:

Date 20 Nov 67
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0650					
0655	BFA	②	ee		SUNRISE BEGIN OBS. both dd.
0706	STORM PET	1	S		
0752	SOOTY SH	1	S		
0815					
0830	GULL SP	1	ee		GRAMPUS RISSO 4 ⁺ imm. 8 E. / W. E.
1023					
43	H. Gull	1	ee		Grampus risso 40 ⁺ Following Fan
1105	.				
10	ST. PET				Porpoise 15 ± 5
15	BFA	1	ee		
25		③			All Dark
28	LWRSP	1	ee		Pilot whale 4
47	RB TB	1	ee		
55	BFA	⑤	ee		ad
1240	LWRSP	1	ee		all dark.
1340	STORM PET	1	ee		
1341	RB TB	1	E		SITTING ON H2O
1355	LEO PHAL	1	ee		
1400	" "	14	ee		KELP INCREASING IN AREA
1401	SOOTY SH	1	S		
1413	" "	1	ee		
15	LWRSP	1	ee		
23	"	2	SE		
1507					
	LWRSP	15 ⁺	S		Dolphin 30 ⁺ - some with white in dorsal
10	Sooty Shear	1	ee		over Dolphin
36	Phalarope	6	ee		ad HAD
38	Red Phal	14	ee		
42	Pale-foot Shear	1	ee		
47	LWRSP	1	ee		Following ship, In light Rain
52					
55	Sooty Shear	3	ee		Dolphin 5 riding Bow wave, some with white
	LWRSP	1	ee		in Dorsal
1615	Sooty Shear	1	ee		
19	Pink Jagger	1	ee		
47	Sooty Shear	1	ee		
1705	BFA	③	E		
1707			ee		Sunset



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN

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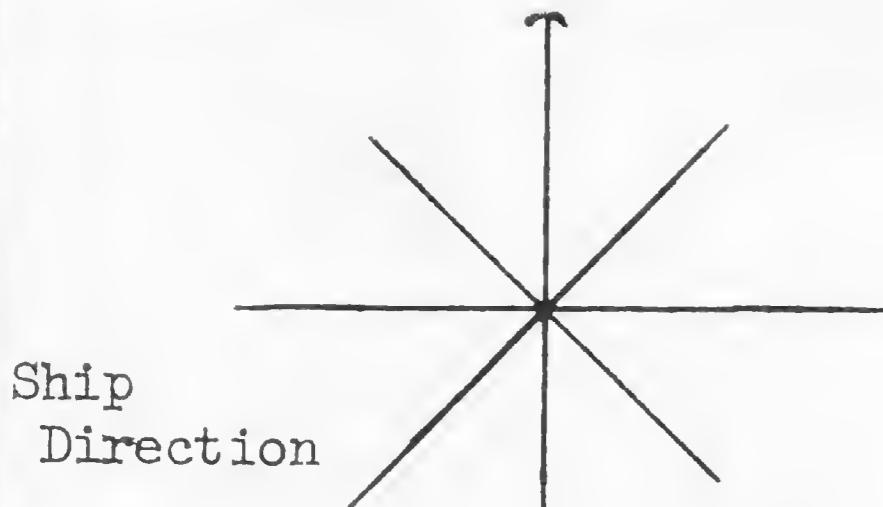
Date 21 Nov 67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0643					Tanrise begin obsr.	SS - 5
55	BFA	(1)	a		Dir	Ston - 1
0705	Sooty Shear	4	s			Chase - 1
37	LWRS P	,	ee			
0800	BFA	(2)	ee			
12	Old Square	,	ee			
20	BFA	(4)	ee		Giving ship ♀	✓ 7
24	Sooty Shear	1	ee			
37	BFA	(5)	s			
1055	SOOTY SH	1	ee			
1125					BALEEN WHALE - 1 - NOR HUMPY POSSIBLY BLUE	
1425	SM PTERO.	2	w		BLEEN 2X	SS - 2
1440	LWRS P	1	ee		distant prob cows.	Ston - 2
1525	LWRS P	1	ee		IN WHALE	Chase - 2
1526	RED PHAB.	3	ee		HELP IN VICTORY	Ston - 3
1532	" "	1	ee		ON H, O	Chase - 3
46	" "	1	ee			Ston - 5
1610						Ston - 5
1611	LWRS P	1	ee		STEAM WHALE 5	Chase - 5
1620	SOOTY SH	1	s			Ston - 1
1700					1 SPERM WHALE	✓ 13
1710	LA	1	ee		1 following	
1715	BFA	(7)	ee		all day	
1720			ee		SS CLOSE OBS.	

0643-100-1 78-1
27
53
11-120 62

793



OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

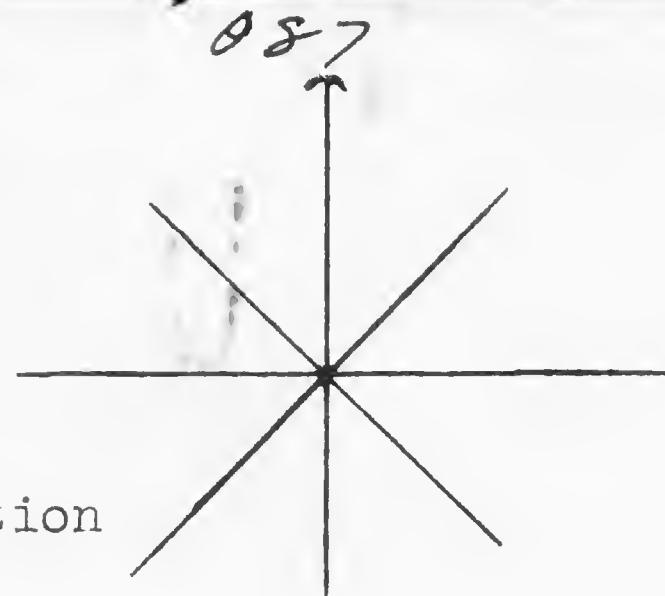
SPECIMEN

or

Date 22 Nov. 67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0655					SUNRISE BEGINS
0700	HEMINGWEY	(1)	ee		
0710	TRAWIC BIRDS	(1)	ee		DIST. AST. PROB RTTB
0800	BFA	(2)	ee		1 dh 13
1130	LA	(1)	ee		
136	BFA	(3)	ee		Following Ad. Bina's bill
1245	GLAUCOUS G.	(1)	ee		41105
1400	BFA	(5)	ee		1st winter
1522	N-Z Shear	(1)	ee		all dark
1716	BFA	(3)	NE		
17					Sunset
					VARIOUS C/L FOR EUNSION OF OMNIOUS WX

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS: 17

SPECIMEN
or

Date 23 Nov 67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0638					Sunrise - reflecting look at a large. Bronze, red + Black Birds streaking over the Horizon.
50	BFA	2	ee		
0715	Sooty Shear	1	SE		
920	H. Gull		ee		1st winter
23	LWRSP	1	ee		
30					ccte 037 Report Grid

252
321
—
573 613

E.A.C. CRUISE DATA

SHIP YAG-40

DATE 16 Nov 1967

	TIME	LAT.	LONG.
SUNRISE	0646	35-42N	122-14W
SUNSET	1715	34-56N	124-30W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 105.0

POSITION

TIME	LAT.	LONG.
0400	35-07N	122-14W
0600	35-02N	122-34W
0800	35-00N	123-02W
1000	35-00N	123-14W
1200	35-03N	123-14W
1400	34-58N	123-44W
1600	34-56N	124-07W
1800	34-55N	124-27W
2000	34-47N	124-48W
2400	34-33N	125-38W

COURSE OR SPEED CHANGE

E.A.C. CRUISE DATA

SHIP VAC-40

DATE 17 Nov 1967

	TIME	LAT.	LONG.
SUNRISE	06-58	34-17N	125-56W
SUNSET	17-13	34-09N	123-59W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 98.4

POSITION

TIME	LAT.	LONG.
0400	34-19N	126-12W
0600	34-16N	126-06W
0800	34-19N	125-41W
1000	34-17N	125-19W
1200	34-14N	124-57W
1400	34-08N	124-36W
1600	34-09N	124-09W
1800	34-09N	123-50W
2000	34-07N	123-28W
2400	34-14N	123-03W

COURSE OR SPEED CHANGE

E.A.C. CRUISE DATA

SHIP YAG-40DATE 18 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0658	34-07N	121-25W
SUNSET	1704	33-21N	122-30W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 92.5

POSITION

TIME	LAT.	LONG.
0400	34-12N	121-51W
0600	34-12N	121-26W
0800	33-56N	121-27W
1000	33-37N	121-29W
1200	33-24N	121-38W
1400	33-22N	121-58W
1600	33-20N	122-22W
1800	33-20N	122-41W
2000	33-18N	123-03W
2400	33-19N	123-47W

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
114°	18°	27°	33-24N	121-30W

E.A.C. CRUISE DATA

SHIP 106-40DATE 19 NOV 67

	TIME	LAT.	LONG.
SUNRISE	0656	33-18N	124-56W
SUNSET	1721	32-55N	126-21W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 92.5

POSITION

TIME	LAT.	LONG.
0400	33-28N	124-20W
0600	33-20N	124-41W
0800	33-19N	125-07W
1000	33-17N	125-26W
1200	33-17N	125-45W
1400	33-15N	126-09W
1600	33-08N	126-22W
1800	32-54N	126-15W
2000	32-47N	125-54W
2400	32-40N	125-16W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
1545	270	180		33-15N	126-19W
1721	180	105		32-55N	126-21W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 20 NOV 1967

	TIME	LAT.	LONG.
SUNRISE	0650	32-31N	124-11W
SUNSET	1707	32-25N	122-20W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 96.0

POSITION

TIME	LAT.	LONG.
0400	32-33N	124-30W
0600	32-32N	124-18W
0800	32-32N	123-58W
1000	32-30N	123-35W
1200	32-31N	123-11W
1400	32-29N	122-51W
1600	32-26N	122-31W
1800	32-30N	122-25W
2000	32-42N	122-33W
2400	32-19N	122-27W

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
0650	105	090	32-31N	124-11W
1707	090	320	32-25N	122-20W
2030	320	160	32-45N	122-36W

E.A.C. CRUISE DATA

SHIP YAG-448DATE 21 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0643	31-39N	122-10W
SUNSET	1720	31-40N	123-56W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 922

POSITION

TIME	LAT.	LONG.
0400	31-52N	122-16W
0600	31-41N	122-11W
0800	31-40N	122-02W
1000	31-43N	122-09W
1200	31-40N	123-00W
1400	31-40N	123-16W
1600	31-42N	123-39W
1800	31-36N	124-03W
2000	31-28N	124-23W
2400	31-20N	124-57W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
0643	160	270		31-39N	122-10W
1800	270	245		31-36N	124-03W
2400	245	270		31-20N	124-57W
0430	270	175		31-14N	125-00W

E.A.C. CRUISE DATA

SHIP YAG-48DATE 22 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0655	30-58N	125-38W
SUNSET	1717	30-49N	123-41W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 95.8

POSITION

TIME	LAT.	LONG.
0400	31-19N	125-35W
0600	31-04N	125-33W
0800	30-56N	125-20W
1000	30-57N	124-55W
1200	30-54N	124-33W
1400	30-52N	124-15W
1600	30-50N	123-55W
1800	30-49N	123-34W
2000	30-51W	123-14W
2400	30-54N	122-35W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
0430	270	175		31-4W	125-48W
0655	175	090		30-58N	125-38W
2000	090	087		30-51W	123-14W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 23 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0638	30-56N	121-31W

SUNSET

TOTAL MILES TRAVELED SUNRISE TO SUNSET 27

POSITION

TIME	LAT.	LONG.
0400	30-55N	121-55W
0600	30-56N	121-36W
0800	30-56N	121-16W
1000	31-01N	120-56W
1200		
1400		
1600		
1800		
2000		
2400		

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
0930	087	037	30-57N	120-00W

PRELIMINARY REPORT

EASTERN AREA CRUISE NO. 31

15-24 NOVEMBER 1967

EASTERN GRID SURVEY NO. 17

Prepared by

Richard D. Chandler

Eastern Area Cruise No. 31 - 15-24 November 1967

Cruise Itinerary: 15 November 1000 Depart San Francisco
16 November 0720 Begin Grid Observations
23 November 0930 End Grid Observations
24 November 1130 Arrive Long Beach

Survey Personnel: Richard D. Chandler (Biologist in Charge)
T. James Lewis

Methods

One-man diurnal observations were made from the wings of the bridge except for the afternoon of the 18th when observations were made from the skiff, concurrent with collections. No non-Grid nor nocturnal observations were taken on this cruise. No BT soundings were taken. Other methods and procedures followed those established on previous cruises.

Cruise Track (See Figure 1)

Very dense fog on the non-Grid leg from San Francisco to the Grid prohibited observations on the 15th. Due to the work required prior to offloading equipment in Long Beach, no observations were made outside the Grid on the 23rd and 24th. A number of departures were made from the nominal Grid cruise track. The departures made it possible to cover all sections of the Grid in the allotted time period which was necessarily foreshortened due to ship scheduling.

Excellent cooperation was received from Captain Kaiser, the deck force, weather personnel, quartermasters, and all concerned with the operation.

Conditions

A complex low-pressure system developed over the Grid area, moved eastward over the coast, retrograded back to the Grid area, and moved to the south, all during the week of the survey. The weather was extremely variable with markedly shifting winds that at times came from the south and southeast instead of the much more regular direction of north and northwest. A steady rain on the 17th was followed with briefer showers almost daily during the rest of the time in the Grid. Water spouts were seen on the 22nd. Heavy rainfall over adjacent land may have contributed to the fact that no stray landbirds were seen. Slicks and floating kelp patches were noted in the eastern third, particularly in Section W.

Collections

Nineteen Red Phalaropes, two Leach's Storm Petrels, one Sooty

Shearwater, and one Pomarine Jaeger were collected in the Grid on the 18th. A serum sample was taken from the Jaeger. No other collections were obtained.

Eastern Grid Survey No. 17

Over the 686 miles and 74.3 hours of diurnal observations 793 birds of 20 species were recorded. Twenty-three birds of three species were collected. Twenty-four marine mammal sightings were obtained.

Highlights

1. Absence of errant landbirds.
2. High numbers of Sooty Shearwaters moving south.
3. High numbers of Red Phalaropes in the eastern sections of the Grid.
4. Unexpected decrease in Fulmar sightings.

The overall pattern of bird distribution within the Grid is again similar to many previous surveys with the high density in the northeast areas and low density in the opposite corner:

1.144	2.320	1.596
.158	.582	3.420
.057	.123	.189
Linear density in each section		
3	11	9
6	5	7
2	7	4
# Species per section		

The three major species - Sooty Shearwater, Leach's Storm Petrel, and Red Phalarope - accounted for over 84 percent of the total observations. Loons, ducks, jaegers, and Herring Gulls each contributed about three percent to the total. The remaining five percent included 11 species present in low numbers.

Species Accounts

Loon sp. # Obs. = 17

Loons (probably Arctics) were seen singly or in groups of 2 to 4 flying southeast across the northeastern corner of the Grid. One bird followed the ship briefly.

Laysan Albatross # Obs. = 3
Diomedea immutabilis

Single birds were seen on the 19th, 21st, and 22nd, in the southwest part of the Grid. These are the first sightings since early May. One bird followed the ship for over half an hour.

Laysan Albatross is here statistically treated like the other birds whereas Black-footed Albatross is again eliminated from the regular tables.

Black-footed Albatross	Total # Obs.	=	31
<u>Diomedea nigripes</u>	Avg. #/day	=	3.8
	Median of 8 days	=	4
	High max. day count	=	7
	Low max. day count	=	2

Of the 28 birds with rump color noted only one was sharp white; the remainder were all dark. Numbers have increased slightly over the low point reached on the last survey. There appears to be a tendency for higher numbers in the southwest.

Fulmar	# Obs.	=	1
<u>Fulmarus glacialis</u>			

The virtual absence of Fulmars in the Grid was very unexpected.

Sooty Shearwater	# Obs.	=	204
<u>Puffinus griseus</u>			

After the abrupt southeast migration peak in mid-September a period of about a month passed wherein Sooty numbers over the coastal area were low. Through the November surveys, however, another influx of southward-moving birds has been noted. This secondary migration is on a broader front and less concentrated than the first. Unlike the well-defined southeast direction in September, the present movement is due south. One collected bird was an immature male and suggests the possibility that the present movement is of immature and non-preebreeding birds, whereas the September peak may have been prebreeding adults.

Pale-footed Shearwater	# Obs.	=	2
<u>Puffinus carneipes</u>			

The second and third records for the Grid area. Both were seen in Section W.

New Zealand Shearwater	# Obs.	=	1
<u>Puffinus bulleri</u>			

The single bird was seen heading northeast in Section Y.

Small <u>Pterodroma</u>	# Obs.	=	4
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The three sightings scattered over the Grid were possibly referable to P. cooki.

Leach's Storm Petrel
Oceanodroma leucorhoa

Obs. = 174

.527	.710	.094
.011	.292	.274
.000	.023	.038

Linear density per section

A southward moving population was present during the survey of the northern third of the Grid, but had evidently passed through the Grid area by the end of the survey. Ten birds were found associated with a pair of Killer Whales on 17 November. The birds were evidently feeding on the remains of some unidentified prey that the whales had taken. Only one dark-rumped bird was noted during the survey. With greater than 95 percent certainty all Storm Petrels sighted were Leach's.

Red-billed Tropicbird
Phaethon aethereus
Tropicbird sp.

Obs. = 2
Obs. = 1

Two Red-bills (1 adult, 1?) were seen in Section V on the 20th. A poorly seen bird, thought to have been a Red-tail, was seen in the southwest division on the 22nd.

Pintail
Anas acuta

Obs. = 32

The single sighting was of a flock of 32 birds flying south in Section S on the 16th.

Oldsquaw
Clangula hyemalis

Obs. = 1

A single female circled the ship on 21 November in Section Z. This constitutes the first sight record for the Grid area.

Black Turnstone
Arenaria melanocephala

Obs. = 1

A single calling bird investigated the ship briefly on the 16th in the northeast subsection (T).

Red Phalarope
Phalarope sp.

Obs. = 252
Obs. = 38
Total 290

.000	.056	.531
.000	.190	2.895
.000	.039	.000

Linear density in each section

The Phalarope concentrations during the previous survey (31 October

to 8 November) were found largely in Section T, the typical high-density area throughout the summer and fall. The usual slick areas were not noted, however, in conjunction with the Phalaropes during the previous survey, although slicks were found further south. During this survey the slick areas and the Phalarope concentrations were again found simultaneously, but about 100 miles south of the old "T" area locations. The importance of the simultaneous occurrence of Phalaropes and the slick areas should be stressed; no other species shows such a high positive correlation with an environmental parameter. More needs to be known about the slicks themselves. Phalaropes, one of the major elements of the Grid avifauna, are as yet the least understood. The sex ratio of the 19 birds collected on the 18th heavily favored females 14:4 (1 not sexed). Winter and spring 1967 collections indicate that females apparently winter in the Grid area while most males move further to the south. High priority should be given to obtaining a large series of this interesting species.

Jaegers
Stercorarius sp.

Obs. = 18

0	.048	.188
0	0	.190
0	0	0

Linear density

Pomarines were positively identified and I feel that most, if not all, Jaegers were indeed this species. Two adults (1 light and 1 intermediate phase) were seen but most of the sightings appeared to be non-adults, generally light phase. The distribution within the Grid is clearly a function of proximity to the coast.

Skua
Catharacta skua

Obs. - 1

One skua was seen heading south in Section S on the 17th.

Glaucous-winged Gull
Larus glaucescens

Obs. = 2

The two sightings in Sections U and Y were of first winter-plumaged birds.

Herring Gull
Larus argentatus

Obs. = 18

No birds were recorded in the southern third of the Grid in the early November survey. During the present survey two immatures were logged in Sections X and Z representing the southward movement of the species, especially of the immatures (see Figure 2). The three adults recorded were all in the northern half of the Grid.

One immature and two adults were found in Section T.

Bonaparte's Gull # Obs. = 4
Larus philadelphia

$$\begin{array}{ccc} 0 & 0 & 2+3 \\ 0 & 0 & 2+1 \\ 0 & 0 & 3+0 \end{array}$$

Occurrence of Bonaparte's Gull on Grid area, fall 1957

First figure EGS 16 early November
Second figure EGS 17 late November

Southbound birds skirted the eastern and northeastern edges of the Grid during both November surveys.

Alcid sp. # Obs. = 1

One unidentified large alcid was observed in Section S.

TABLE 1, PART A; DIURNAL BIRD OBSERVATIONS, SUMMARY BY COUNT AND LINEAR DENSITY IN THE NINE DIVISION DISPLAY,
EASTERN GRID SURVEY #17, 16-23 NOVEMBER 1967.

	R	S	T	U	V	W	X	Y	Z	TOTAL
LOON sp.		.120	15	.063	2					.025 17
LAWSAN ALBATROSS				.011	1			.015	2	.009 3
FULMAR		.008	1							.001 1
SOOTY SHEARWATER	.600	33	1.008	126	.282	9	.068	6	.051 4	.297 209
PALE-FOOTED SHEARWATER								.023	2	.003 2
NEW ZEALAND SHEARWATER										.001 1
SMALL PTERODROMA		.008	1		.011	1				.000 4
SHEARWATER/PETREL sp.		.016	2	.031	1			.023	2	.007 5
STORM PETREL	.527	29	.710	89	.094	3	.011	1	.292 23	.254 179
RED-BILLED TROPICBIRD							.025	2		.003 2
TROPICBIRD sp.										.001 1
PINTAIL		.256	32							.047 32
OLDSQUAW										.001 1
BLACK TURNSTONE				.031	1					.001 1
PHALAROPES		.056	7	.531	17		.190	15	2.895 246	.423 290
JAEGERS		.048	6	.188	6			.068	6	.026 18
SKUA		.008	1							.001 1
GLAUCOUS-WINGED GULL					.011	1			.008 1	.003 2
HERRING GULL	.018	1	.048	6	.156	5	.022	2	.013 1	.026 18
WESTERN GULL					.094	3				.009 3
BONAPARTES GULL					.094	3				.006 4
GULL sp.				.031	1		.013	1		.003 2
LARGE ALCID sp.		.008	1							.001 1
BIRD sp.		.024	3		.022	2			.011 1	.009 6
TOTAL	1.144	63	2.320	290	1.596	51	.158	14	.582 46	1.156 793
# MILES		55	125		32		89	79		686
# Hours		5.7	13.3		3.4		10.4	8.5		74.3

TABLE I PART B:

	R	S	T	U	V	W	X	Y	Z	R	U	V	Y	T	W	Z		TOTAL	Occurrence
	NORTH	CENTER	SOUTH	WEST	CENTER	EAST	#OBS	% TOTAL	# COL.	COL.	SPEC.	COL.	SECTION	DATE(S)					
LOON SP.	.080	17					.045	15	.012	2						17	2.1		
LAYSAN ALBATROSS			.004	1	.009	2	.006	1	.006	2						3	0.4		
FULMAR	.005	1					.003	1								1	0.1	S 16	
SOOTY SHEARWATER	.793	168	.109	28	.037	8	.218	39	.396	132	.191	33				204	25.7 1		
PALE-FOOTED SHEARWATER			.008	2							.012	2				2	0.3	W 18&20	
NEW ZEALAND SHEARWATER					.005	1			.003	1						1	0.1	Y 22	
SMALL PTERODROMA	.005	1	.004	1	.009	2	.006	1	.009	3						4	0.5		
SHEARWATER/PETREL SP.	.014	3	.008	2					.006	2	.017	3				5	0.6		
STORM PETREL	.571	121	.187	48	.023	5	.168	30	.345	115	.168	29				174	21.9 2		
RED-BILLED TROPICBIRD			.008	2					.006	2						2	0.3	V 20	
TROPICBIRD SP.					.005	1	.006	1								1	0.1	X 22	
PINTAIL	.151	32							.096	32						32	4.0	S 16	
OLDSQUAW					.005	1					.006	1				1	0.1	Z 21	
BLACK TURNSTONE	.005	1									.006	1				1	0.1		
PRALINOPES	.113	24	1.019	261	.023	5			.081	27	1.520	263				290	36.6 19		
SABERGERS	.057	12	.023	6						6	.070	12				18	2.3 1		
SKUA	.005	1							.003	1						1	0.1	S 17	
GLAUCOUS-WINGED GULL			.004	1	.005	1	.006	1	.003	1						2	0.3		
HERRING GULL	.057	12	.016	4	.009	2	.022	4	.021	7	.041	7				18	2.3		
WESTERN GULL	.014	3									.017	3				3	0.4	T 16&18	
BONAPARTES GULL	.014	3	.004	1							.023	4				4	0.5		
GULL SP.	.005	1	.004	1					.003	1	.006	1				2	0.3		
LARGE ALCID SP.	.005	1							.003	1						1	0.1	S 16	
BIRD SP.	.014	3	.012	3			.011	2	.009	3	.006	1				6	0.8		
TOTAL	1.906	404	1.410	361	.128	28	.441	79	1.054	352	2.092	362				793	23		
# MILES		212		256		218		179		334		173					686		
# HOURS		22.4		28.6		23.3		19.6		35.4		19.3					74.3		

EASTERN PACIFIC OCEAN

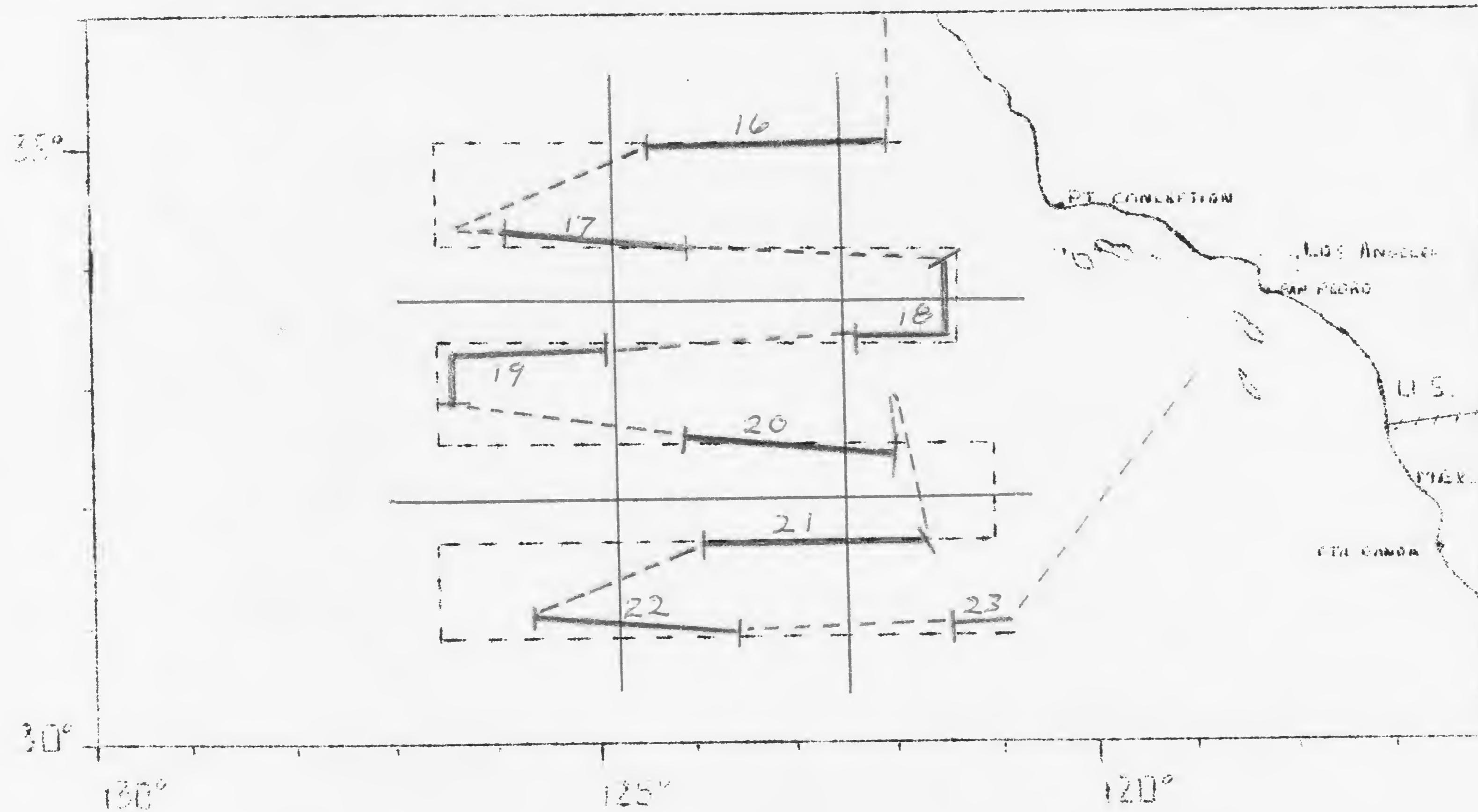


FIG #1 CRUISE TRACK,
EGS #17 (EAC #31),
16-23 Nov. 1967

EASTERN PACIFIC OCEAN

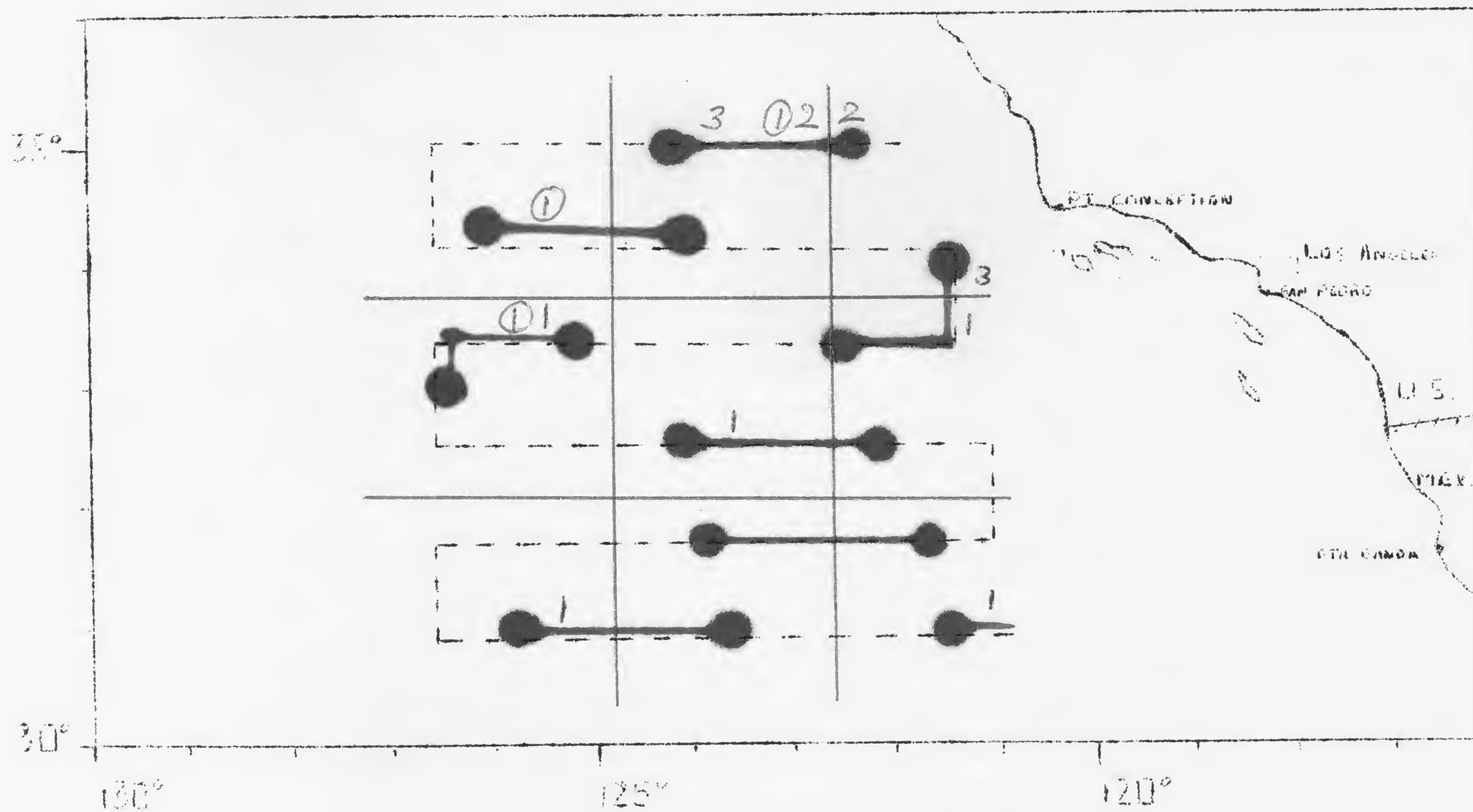


FIG. #2 EGS #17 16-23 NOVEMBER 1967
HERRING GULL-AGE DISTRIBUTION
① ADULT
I NON-ADULT